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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,192	10/29/2007	Bruce Rutherford	A35860-PCT-USA (070457.)	2921
21003	7590	02/09/2011	EXAMINER	
BAKER BOTTS L.L.P. 30 ROCKEFELLER PLAZA 44TH FLOOR NEW YORK, NY 10112-4498			WINTER, JOHN M	
			ART UNIT	PAPER NUMBER
			3685	
			NOTIFICATION DATE	DELIVERY MODE
			02/09/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/560,192	RUTHERFORD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JOHN M. WINTER	3685	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 11-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 22-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
       Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Acknowledgements**

1. The Applicants' amendment filed on November 15, 2010 is hereby acknowledged,

### **Election/Restrictions**

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10, 22-30 are drawn to user authentication, classified in class 726 subclass 28.
- II. Claims 11-22 are drawn to a secure transaction involving a token, classified in class 705 subclass 65.

3. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed in invention I discloses an authentication process that does not include the particulars of combination II such as a "merchant".

Examiner notes that it would be a burden to search multiple inventions given their separate status in the art as noted above.

4. The requirement is deemed proper and therefore made FINAL. Via paper filed on November 15, 2010 a provisional election was made with traverse to prosecute the of

Invention I, claims 1-10 and 22-30. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### **Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 22-30 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent (See also *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, a §101 process must (1) be tied to a particular machine or apparatus (machine implemented); or (2) particularly transform a particular article to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet

Art Unit: 3685

prong (2), the method step should positively recite identifying the material that is being changed to a different state or positively recite the subject matter that is being transformed. In this particular case, claim 22 fails prong (1) because the “tie” (e.g. an authentication token ) is representative of extra-solution activity. Additionally, the claim(s) fail prong (2) because the method steps do not transform the underlying subject matter to a different state or thing.

Claims 23-30 are either dependant upon claim 22 or contain similar limitations and are rejected for at least the same reasons.

### **Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim1-10 and 22-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the feature “a reader that is linkable and can communicate with a chip” however, the language “can communicate” fails to limit the scope of the claimed invention. It has been held that actions that may or may not be done are indefinite and does not distinguish the claim from the prior art . In re Collier, 158 USPQ 266 (CCPA 1968). Claims 2-10 and 22-30 are either dependant upon claim 1 or contain similar limitations and are rejected for at least the same reasons.

Art Unit: 3685

Claim 4 is indefinite because it is a hybrid claim. In particular, the claim appears to be directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention. Evidence to support an interpretation that claim 4 is a product is (1) the preamble which states "the system of claim 1. ." Alternatively, evidence that indicates the claim is directed to a process or method is the body of the claim which recites "results in generation oby the ACS of Account holder authentication value" Because of this conflicting evidence, it is unclear if claim 4 is a product or process claim. See MPEP §2173.05(p) II or Ex Parte Lyell, 17 USPQ2d 1548 (B.P.A.I. 1990). For prior art purposes, the Examiner interprets the claim as being drawn to a product claim.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-10 and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ziegler US Patent Application Publication 2004/0044739 in view of Wynn (US Patent 5,859,419) in further view of Goldthwaite et al (US Patent Application Publication 2004/0019564).

8. As per claims 1 and 22

Art Unit: 3685

Zeigler et al ('739) discloses a system for authenticating a customer transaction on a electronic network, the system comprising:

an access device for customer access to the electronic network;(Figure 1, paragraphs 21, 24, 25 )

an authentication request server (ARS) is linked to the electronic network and can communicate with a party requesting authentication of the transaction, (Paragraphs 44,45) wherein the ARS is configured to receive transaction information from the requesting party and to communicate transaction data to the reader via the customer's access device,(Paragraphs 36-38)

wherein the ARS is further configured to evaluate customer-identifying data from the authentication token and to validate the authentication token for authentication of the customer transaction. (Paragraphs 44,45, 57)

Zeigler et al ('739)does not explicitly disclose an integrated circuit chip that is issued to the customer and contains customer identifying data; a reader that is linkable to the access device and can communicate with the chip; wherein the reader is configured to receive the transaction data and to communicate a value based on the transaction data to the chip, wherein the chip is configured to generate a cryptogram based on at least a portion of the transaction data and at least a portion of the customer-identifying data on the chip, wherein the reader is further configured to communicate an authentication token based on the cryptogram to the ARS. Wynn et al., ('419) discloses an integrated circuit chip that is issued to the customer and contains customer identifying data; (Column 4, lines 17-29;column 17, lines 45-58 ) a reader that is linkable to the access device and can communicate with the

Art Unit: 3685

chip; (Column 8, lines 11-18) wherein the reader is configured to receive the transaction data and to communicate a value based on the transaction data to the chip,(Column 9, lines 1-15; Column 14, lines 41-52) wherein the chip is configured to generate a cryptogram based on at least a portion of the transaction data and at least a portion of the customer-identifying data on the chip, (Column 8, lines 52-58) wherein the reader is further configured to communicate an authentication token based on the cryptogram to the ARS. (Column 19, lines 39-49 – Examiner notes that the manner in which a claimed apparatus is intended to be used (e.g. configured to generate ) does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform(MPEP 2114 and Ex parte Masham, 2 USPQ2d 1647 (1987))). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Zeigler et al ('739)'s teaching in view of Wynn et al., ('419)'s method in order to validate a user prior to approving a transaction.

Zeigler et al ('739)does not explicitly disclose an Access Control Server (ACS) is linked to the electronic network wherein the ACS is configured to communicate directly with the customer's access device for authentication of the transaction bypassing a need for authentication software downloads from the requesting party to the customer's access device. Goldthwaite et al., ('564) discloses an Access Control Server (ACS) is linked to the electronic network wherein the ACS is configured to communicate directly with the customer's access device for authentication of the transaction bypassing a need for authentication software downloads from the requesting party to the customer's access device. ( Figures 9, paragraphs 18, 37). It would have been obvious to one of ordinary skill



Art Unit: 3685

in the art at the time of the invention was made to modify Zeigler et al ('739)'s in view of Wynn ('419) teaching in view of Goldthwaite et al., ('564)'s method in order to validate a user prior to approving a transaction.

9. In regard to claims 1-10 the Examiner notes that it has been held that the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform(MPEP 2114 and Ex parte Masham, 2 USPQ2d 1647 (1987)). Similarly, while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone (MPEP 2214; In re Swineheart, 169 USPQ 226; In re Schreiber, 44 USPQ2d 1429 (Fed. Cir. 1997)).

10. As per claims 2 and 23,  
Zeigler et al ('739) discloses the system of claim 1,  
wherein the transaction data communicated to the reader comprises a challenge based on the transaction information.(Paragraphs 54-55,60). Examiner notes that the type of data communicated will not distinguish the claimed apparatus from the teachings of the prior art (In re Gulack, 217 USPQ 401 (Fed. Cir. 1983), In re Ngai 70 USPQ2d (Fed. Cir. 2004), In re Lowry 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01).

11. As per claims 3 and 24,  
Zeigler et al ('739) discloses the system of claim 1,

Art Unit: 3685

wherein the authentication token has a format that is compatible with 3-D Secure protocol message formats.(Paragraphs 44,45, 211). Examiner notes that the format of the data will not distinguish the claimed apparatus from the teachings of the prior art (In re Gulack, 217 USPQ 401 (Fed. Cir. 1983), In re Ngai 70 USPQ2d (Fed. Cir. 2004), In re Lowry 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01).

12. As per claims 4 and 25,

Zeigler et al ('739) discloses the system of claim 1,

Zeigler et al ('739) does not explicitly disclose wherein the authentication token upon successful evaluation by the ARS results in generation by the ACS of an Accountholder Authentication Value (AAV) that is transported on the electronic network in an Universal Cardholder Authentication Field which has a 20 byte length.

Goldthwaite et al., ('564) discloses an wherein the authentication token upon successful evaluation by the ARS results in generation by the ACS of an Accountholder Authentication Value (AAV) that is transported on the electronic network in an Universal Cardholder Authentication Field which has a 20 byte length. ( paragraph 11). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Zeigler et al ('739)'s teaching in view of Goldthwaite et al., ('564)'s method in order to validate a user prior to approving a transaction.

Art Unit: 3685

13. As per claims 5-6 and 26,

Zeigler et al ('739) discloses the system of claim 1,

Zeigler et al ('739) does not explicitly disclose wherein the chip and the reader are co-disposed in a single physical package. Wynn et al., ('419) discloses wherein the chip and the reader are co-disposed in a single physical package. (Figure 1; column 4, lines 44-54 – Examiner notes that the manner in which a claimed apparatus is intended to be used (e.g. configured to generate ) does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform(MPEP 2114 and Ex parte Masham, 2 USPQ2d 1647 (1987))). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Zeigler et al ('739)'s teaching in view of Wynn et al., ('419)'s method in order to validate a user prior to approving a transaction.

14. As per claims 7 and 27,

Zeigler et al ('739) discloses the system of claim 1,

wherein the ARS is configured to evaluate customer-identifying data from the authentication token by first rebuilding the data used by the chip to generate the cryptogram, next generating a replica cryptogram from rebuilt data, and then matching the authentication token with the replica cryptogram. (Paragraphs 44,45, 109, 115 and 116 – Examiner notes that the manner in which a claimed apparatus is intended to be used (e.g. configured to evaluate ) does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform(MPEP 2114 and Ex parte Masham, 2 USPQ2d 1647 (1987))).

15. As per claims 8 and 28,  
Zeigler et al ('739) discloses the system of claim 1,  
further comprising a cardholder database that can be accessed by ARS to retrieve stored  
customer information.(Paragraphs 56 and 57)

16. As per claims 9 and 29,  
Zeigler et al ('739) discloses the system of claim 1,  
in which the ARS is further configured to communicate an authentication result to the  
requesting entity.(Paragraphs 111, 123, 124)

17. As per claims 10 and 30,  
Zeigler et al ('739) discloses the system of claim 1,  
wherein the ARS is further configured to match an application transaction counter received  
from the chip against previous values of the application transaction counter received from  
the chip and to accordingly authenticate the transaction.(Paragraphs 109, 122, 164 – counter  
is clock value – Examiner notes that the manner in which a claimed apparatus is intended to  
be used (e.g. configured to match ) does not distinguish the claimed apparatus from the  
prior art- if the prior art has the capability to so perform(MPEP 2114 and Ex parte Masham,  
2 USPQ2d 1647 (1987))).

## Conclusion

Art Unit: 3685

18. Inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. WINTER whose telephone number is (571)272-6713. The examiner can normally be reached on M-F 8:30-6, 1st Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571) 272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

I.

JMW

/Calvin L Hewitt II/  
Supervisory Patent Examiner, Art Unit 3685